

## **IN THE CLAIMS:**

A complete listing of the claims is set forth below. Please amend the claims as follows:

1. **(Currently Amended)** An electronic commerce system for translating between one or more schemas, the system comprising:

a global content directory server coupled to one or more seller databases, the global content directory server ~~for~~ providing a plurality of buyers access to the one or more seller databases; and

a schema translation tool coupled to the global content ~~directory~~, directory server, the schema translation tool comprising:

a mapping module operable to:

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes; and

associate one or more source classes of the source schema with one or more target classes of the target schema; and

an ontology generation module operable to generate a product ontology for each of the target classes based on the product ontologies of the associated source classes.

2. **(Previously Presented)** The system of Claim 1, wherein the mapping module is further operable to:

receive input from at least one of the plurality of buyers indicating one or more source classes to be associated with one or more target classes; and

associate the source classes with the target classes in response to the input from at least one of the plurality of buyers.

3. **(Previously Presented)** The system of Claim 2, wherein the mapping module is further operable to:

generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyers to graphically associate classes of the source schema with classes of the target schema; and

communicate the graphical representation to at least one of the plurality of buyers.

4. **(Previously Presented)** The system of Claim 1, wherein the source classes are leaf classes of the source schema.

5. **(Previously Presented)** The system of Claim 1, wherein the ontology generation module is further operable to generate a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes.

6. **(Previously Presented)** The system of Claim 1, wherein the ontology generation module is further operable to generate a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes, the product ontologies of the target classes having been generated by the ontology generation module.

7. **(Previously Presented)** The system of Claim 1, wherein:

at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product; and

the ontology generation module is further operable to generate a seller ontology for each of the target classes based on the seller ontologies of the associated source classes.

8. **(Previously Presented)** The system of Claim 1, wherein:

one or more pointers identifying the one or more seller databases are associated with at least one source class, the one or more seller databases including product data associated with one or more products categorized in the source class; and

the mapping module is further operable to associate the one or more pointers of the source class with one or more target classes associated with the source class.

9. **(Previously Presented)** A method for translating between one or more schemas, comprising:

receiving information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes;

associating one or more source classes of the source schema with one or more target classes of the target schema; and

generating a product ontology for each of the target classes based on the product ontologies of the associated source classes.

10. **(Previously Presented)** The method of Claim 9, further comprising:

receiving input from at least one of a plurality of buyers indicating one or more source classes to be associated with one or more target classes; and

associating the source classes with the target classes in response to the input from at least one of the plurality of buyers.

11. **(Previously Presented)** The method of Claim 10, further comprising:

generating a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyers to graphically associate classes of the source schema with classes of the target schema; and

communicating the graphical representation to at least one of the plurality of buyers.

12. **(Original)** The method of Claim 9, wherein the source classes are leaf classes of the source schema.

13. **(Original)** The method of Claim 9, further comprising generating a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes.

14. **(Original)** The method of Claim 9, further comprising generating a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes.

15. **(Original)** The method of Claim 9, wherein:

at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product; and

the method further comprises generating a seller ontology for each of the target classes based on the seller ontologies of the associated source classes.

16. **(Original)** The method of Claim 9, wherein:

one or more pointers identifying one or more seller databases are associated with at least one source class, the seller databases including product data associated with one or more products categorized in the source class; and

the method further comprises associating the pointers of the source class with one or more target classes associated with the source class.

17. **(Previously Presented)** Software for translating between schemas, the software embodied in a computer-readable medium and, when executed, operable to:

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes;

associate one or more source classes of the source schema with one or more target classes of the target schema; and

generate a product ontology for each of the target classes based on the product ontologies of the associated source classes.

18. **(Previously Presented)** The software of Claim 17, further operable to:

receive input from at least one of a plurality of buyers indicating one or more source classes to be associated with one or more target classes; and

associate the source classes with the target classes in response to the input from at least one of the plurality of buyers.

19. **(Previously Presented)** The software of Claim 18, further operable to:

generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of the plurality of buyers to graphically associate classes of the source schema with classes of the target schema; and

communicate the graphical representation to at least one of the plurality of buyers.

20. **(Original)** The software of Claim 17, wherein the source classes are leaf classes of the source schema.

21. **(Original)** The software of Claim 17, further operable to generate a product ontology for a target class by determining the intersection of the product attributes included in the product ontologies of the associated source classes.

22. **(Original)** The software of Claim 17, further operable to generate a product ontology for a parent class of a plurality of target classes by determining the intersection of the product attributes included in the product ontologies of the target classes.

23. **(Original)** The software of Claim 17, wherein:

at least the source schema further comprises a seller ontology associated with one or more of the classes, each seller ontology comprising one or more attributes associated with one or more sellers of a product; and

the software is further operable to generate a seller ontology for each of the target classes based on the seller ontologies of the associated source classes.

24. **(Original)** The software of Claim 17, wherein:

one or more pointers identifying one or more seller databases are associated with at least one source class, the seller databases including product data associated with one or more products categorized in the source class; and

the software is further operable to associate the pointers of the source class with one or more target classes associated with the source class.

25. **(Previously Presented)** A system for translating between schemas, comprising:

means for receiving information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes;

means for associating one or more source classes of the source schema with one or more target classes of the target schema; and

means for generating a product ontology for each of the target classes based on the product ontologies of the associated source classes.



26. **(Currently Amended)** A schema translation tool coupled with a global content directory server, the schema translation tool, comprising:

a mapping module operable to:

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, wherein the target schema comprises a different taxonomy than the taxonomy of the source schema, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes, at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes, the seller databases including product data associated with one or more products categorized in the classes;

generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyers to graphically associate the classes of the source schema with classes of the target schema;

communicate the graphical representation to at least one of the plurality of buyers;

receive input from at least one of the plurality of buyers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema;

associate one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyers; and

associate the pointers of the source classes with one or more target classes associated with the source class; and

an ontology generation module operable to generate a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes.

27. **(Previously Presented)** A method for translating between schemas, comprising:

receiving information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes, at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes, the seller databases including product data associated with one or more products categorized in the classes;

generating a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyers to graphically associate the classes of the source schema with classes of the target schema;

communicating the graphical representation to at least one of the plurality of buyers;

receiving input from at least one of the plurality of buyers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema;

associating one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyers;

associating the pointers of the source classes with one or more target classes associated with the source class; and

generating a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes.

28. **(Previously Presented)** Software for translating between schemas, the software embodied in a computer-readable medium and, when executed, operable to:

receive information regarding a source schema and a target schema, the source and target schemas each comprising a taxonomy comprising a hierarchy of classes into which products may be categorized, at least the source schema further comprising a product ontology associated with one or more of the classes, each product ontology comprising one or more product attributes, at least the source schema further comprising one or more pointers identifying one or more seller databases and associated with one or more classes, the seller databases including product data associated with one or more products categorized in the classes;

generate a graphical representation of the taxonomies of the source and target schemas, the graphical representation allowing at least one of a plurality of buyers to graphically associate the classes of the source schema with classes of the target schema;

communicate the graphical representation to at least one of the plurality of buyers;

receive input from at least one of the plurality of buyers indicating one or more source classes of the source schema to be associated with one or more target classes of the target schema;

associate one or more source classes with one or more target classes in response to the input from at least one of the plurality of buyers;

associate the pointers of the source classes with one or more target classes associated with the source class; and

generate a product ontology for each of the target classes based on the intersection of the product attributes included in the product ontologies of the associated source classes.